



Students Engagement and Academic Performance Among Accountancy, Business and Management (ABM) Students of Tuyom Senior High School and Gelacio C. Babao Sr. Memorial National High School

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Abstract

The study determined the relationship between student engagement and academic performance among Accountancy, Business, and Management (ABM) students of Tuyom Senior High School and Gelacio C. Babao Sr. Memorial National High School. The study utilized a quantitative research design using the descriptive-correlational design. In terms of sampling method, the study employed a purposive sampling method. The questionnaire on student engagement was adapted from the study of Delfino (2019), while the grading scale on academic performance was patterned from the SF9 K-12 DepEd Curriculum. Data were analyzed using mean and Pearson Product Moment Correlation coefficients. Results showed that the level of student engagement among Accountancy Business and Management (ABM) students is high, which indicates that it is oftentimes observed. The level of academic performance is very satisfactory. Furthermore, there is no significant relationship between student engagement and academic performance among ABM students of Tuyom Senior High School and Gelacio C. Babao Sr. Memorial National High School. By understanding the factors that lead to student engagement in the educational process, institutions, teachers, and school administrators can develop and implement strategies to improve student engagement and academic performance, leading to improved academic outcomes and a positive educational experience.

Keywords: *Student Engagement, Academic Performance, Descriptive Correlation, Tuyom Senior High School, and Gelacio C Babao Sr. Memorial National High School*

Introduction

Academic performance, which includes elements like grades, test scores, and overall educational results, refers to the accomplishment and success student experience in their academic endeavors (Smith, 2019). Nearly all activities were disrupted after the COVID-19 pandemic, but education and learning were particularly hard hit (Pradas, Pelaez, & Prieto, 2021). With this in mind, Panagouli et al.'s study from 2021 shows how the COVID-19 outbreak had a major impact on students' overall academic performance. Additionally, the pandemic brought about an educational crisis that prevented pupils from learning what they were intended to and resulted in the loss of skills they had already attained (Cardenas, Lomeli, & Ruelas, 2022).

Moreover, after the COVID-19 pandemic, it has altered the landscape of higher education, creating shifts in how schools deliver instruction and how students engage in their courses and activities (Perry, 2020). Furthermore, the pandemic has likely affected the academic performance of many students. In Manila, Philippines, a study carried out by the University of San Carlos (USC) and Thames International School found that students in private schools across the country experienced setbacks in learning due to disruptions caused by the COVID-19 pandemic. The assessment, known as the Philippine Assessment for Learning Loss Solutions (PALLS), involved evaluating 3,600 students in Grades 1-12 from 18 private schools nationwide during the last quarter of the previous year. Because of this, it is paramount to study the effects of the pandemic and the changes it has brought to education on student engagement and academic performance (Herrera, Syam, and McCandless, 2020). Doing so





will not only provide valuable insight into the academic repercussions of the pandemic but also offer insights into how instructional and curricular components can be modified and refined to best support student success in the future (Walti, Kretzschmar, Coenen and Schubert, 2021). For example, in a recent study on student learning in a post-COVID-19 higher education environment in Canada, a comprehensive survey of faculty, staff, and students was conducted to determine changes in the educational experience, instructional approaches, and overall student engagement (Bender, Pool, Arial and Kirsh, 2021). For the students surveyed, it was concluded that the shift to online and mixed instructional delivery models had vastly decreased their learning engagement and enthusiasm. The study's authors argued that providing the necessary support and resources, such as effective communication between faculty and students, is essential to promoting a better learning experience and improving student academic performance (Bender et al., 2021).

Furthermore, student engagement is an essential factor for academic success, and this has been further highlighted by the COVID-19 pandemic and the subsequent move to remote learning for students worldwide (Primavera, 2020). Previous works have documented the association between student engagement and higher academic performance, with research identifying the impact of engagement on improved test scores and higher grades (Boulton,

Hughes, Kent, Smith, and Williams, 2020). The factors that influence student engagement include the teacher's role and dimensions of engagement, as well as student motivation and attitude toward learning (Yoder, Posamentier, Godek, Seibel, and Dusenbury, 2020). This factor is especially pertinent in the post pandemic educational environment, given the shift to remote learning and increased demands of device ownership and access to the internet.

Despite the growing body of literature on this topic, published studies have yet to be conducted concerning student engagement and academic performance among specific student populations, such as Accountancy, Business, and Management (ABM) students at Tuyom Senior High School and Gelacio C. Babao Sr. Memorial National High School. While previous students have examined the relationship between student engagement and academic performance in different contexts, there needs to be more research that focuses on ABM students in the post pandemic era. Therefore, this study aimed to fill this research gap by investigating the relationship between student engagement and academic performance among ABM students of Tuyom Senior High School and Gelacio C. Babao Sr. Memorial National High School. Furthermore, understanding the effects of the COVID-19 pandemic on student engagement and academic performance among ABM students of Tuyom Senior High School can provide valuable insights into the interventions necessary to address these issues. By identifying the factors influencing student engagement and academic performance, educational institutions can develop strategies to promote a more supportive learning environment, enhance student engagement, and ultimately improve student academic performance.

Literature Review

According to Doyle (2021), student engagement in higher education emphasizes the importance of active involvement in the learning process. He argues that engaged students are more likely to succeed academically and develop essential skills for the future.

Doyle identifies various factors influencing student engagement, such as the learning environment, teaching methods, and the level of student motivation. He suggests that educators play a crucial role in fostering engagement by creating interactive and stimulating learning environments. Furthermore, Doyle highlights the significance of technology in enhancing student engagement. Leveraging digital tools and online platform can provide students with opportunities for collaborative learning, personalized instruction, and real-world application of knowledge. The author also underscores the importance of assessing and measuring student engagement to identify areas for improvement in educational practices. Strategies like formative assessments and feedback mechanisms can aid in gauging and enhancing student involvement. In conclusion, Doyle's work underscores the multifaceted nature of student engagement, involving both educators and students. By prioritizing interactive learning experiences, leveraging technology, and regularly assessing engagement levels, higher education institutions can contribute to the holistic development and success of their students.

Three Types of Student Engagement

According to Moreira, Cunha, and Inman (2020), there are three types of student engagement: behavioral engagement, cognitive engagement, and emotional engagement. According to Schaffner, Smith, and Rosenthal (2018), student engagement was positively and significantly related to academic achievement in higher education, with a stronger relationship in younger students. This led the researchers to draw the conclusion that school-level interventions that increase or maintain student engagement may have a positive impact on academic achievement.

Positive and significant correlation between student engagement and academic performance in higher education with an effect size of 0.33, and determined that student engagement in active, collaborative, and self-regulated learning was strongly associated with improved academic performance, leading the authors to conclude that college and university officials should prioritize student engagement because it is a critical indicator of academic success in higher education. Added by Reis, Silva I, Lopes, Moreira, and Silva (2022) that student engagement has a significant positive impact on school climate, particularly in primary and secondary schools, as evidenced by an effect size of 0.35, leading the authors to recommend interventions aimed at enhancing student engagement as a means of improving school climate.

The study of Knorr and Mayfield-Ingram (2018) identified positive correlations between student engagement and academic performance in secondary school students, finding that the most engaged student achieved the highest grades. Bradley, Day-vines, and Gabie (2019) reported that student engagement is positively linked with achievement growth in college and career readiness measures, thus indicating the importance of engagement in achieving educational goals, a meta-Analysis by Pascarella, Smart, Antonenko, Blaich, and Morgan (2019) reported that school engagement has a consistent, positive effect on school performance.

Reis, Silva, Lopes, Moreira, and Silva (2022) discovered a strong and positive relationship between student engagement and academic performance in higher education. They found that active, collaborative, and self-regulated learning were closely tied to improved academic performance, suggesting that college and university officials should prioritize student engagement as a critical indicator of success in higher education. Additionally, the study revealed that student engagement also had a significant positive impact on school climate, particularly in primary and secondary schools, with an effect size of 0.35. Consequently, the authors recommended implementing interventions to enhance student engagement as a means to improve school climate.





Knorr and Mayfield-Ingram (2018) discovered that secondary school students who were more engaged had a positive correlation with their academic performance, with the most engaged students achieving the highest grades. Bradley, Day-vines, and Gabie (2019) also noted a positive association between student engagement and achievement growth in college and career readiness measures, emphasizing the significance of engagement in reaching educational goals. Furthermore, a meta-analysis conducted by Pascarella, Smart, Antonenko, Blach, and Morgan (2019) revealed that school engagement consistently and positively influenced school performance.

Students Engagement in terms of Behavioral Engagement

According to Vogel, Werner, and Schulte (2019), students who actively engage in learning tend to achieve higher grades. Lei, Cui, and Zhou (2019) pointed out that among the three types of engagement, behavioral engagement has the most significant correlation with academic performance. They suggest that this is possibly because behavioral engagement enhances students' exemplary academic performance and boosts their appreciation and satisfaction with studying. Nguyen, Canata, and Miller (2018) stressed the importance of teachers and peers in strengthening a student's behavioral engagement during class discussions. They also highlighted the need to break down behavioral engagement into three components: disengagement, active engagement, and passive engagement to better understand the different types of behavioral engagement and their distinctions.

Students Engagement in terms of Cognitive Engagement

In a study conducted by Lo and Hew (2020), the comparison of independent online study methods involving gamification, traditional learning, and flipped learning with gamification on mathematics achievement and student cognitive engagement revealed that the flipped learning with gamification approach was significantly more effective in enhancing cognitive engagement compared to the other two methods. Husni, Jumaat, and Tasir (2023) developed inquiry-based learning (IBL) activities that have been shown to increase students' cognitive engagement, retention, and motivation to learn, resulting in higher rates of low-level cognitive motivation and retention. Additionally, Barlow et al. (2022) found that differentiating cognitive engagement models is indeed applicable when considering factors such as in-class note-taking and material processing by students.

Students Engagement in terms of Emotional Engagement

Mattingly and Caldwell's experiment in 2019 demonstrated that engaging with online text on an emotional level led to improved comprehension and better overall learning outcomes. This emphasizes the importance of creating captivating content and has practical implications for education by shedding light on how emotions influence learning, suggesting that emotional engagement can help address learning barriers like anxiety. In a study by Zhang, Cao, and Liu in 2020, they explored the effects of emotional engagement in a massive open online course (MOOC) setting and discovered that emotional engagement significantly influenced learners' satisfaction with the course and their intentions to continue learning. Furthermore, a study conducted by Li, Lu, and Huang in 2021 delved into the impact of emotional engagement on college students' academic achievement. It revealed that emotional engagement was a notable predictor of academic success, with higher levels of emotional engagement linked to higher academic achievement.

To summarize, student engagement can be categorized into three main types: behavioral, cognitive, and emotional. Numerous studies have demonstrated that student engagement has a positive and significant impact on academic achievement, with a more pronounced connection observed in younger students and within higher education settings. Various contextual factors, such as class size, discipline, and instructional methods, can influence the relationship between student engagement and academic performance. Among the three types of engagement, behavioral engagement shows the strongest association with academic success. Strategies like flipped learning with gamification and inquiry-based learning activities can enhance cognitive engagement. Emotional engagement, on the other hand, contributes to improved comprehension and overall learning outcomes and can help address issues related to learning anxiety. The collective findings from these studies underscore the importance of prioritizing student engagement for educators and administrators as a critical predictor of academic success.

Students Engagement in terms of Academic Performance

According to Zhu, Wang, Li, and Yuan (2018), their research revealed that parental monitoring positively influenced the academic motivation and learning strategies of college students. This, in turn, resulted in improved academic performance, emphasizing the importance of fostering a conducive learning environment and offering parental support to enhance the academic outcomes of college students. Boaz and Grossman (2019) also found a positive correlation between higher levels of motivation in college students and better academic performance.

They highlighted the significance of educators nurturing student motivation to improve academic results. Yilmaz and Akbulut (2020) provided support for the idea that technology-based instruction had a positive impact on the academic performance of Turkish secondary school students. This effect was especially pronounced when students had access to devices, clear instructions, and expectations. Such instruction facilitated greater resource access, more engaging learning experiences, increased collaboration opportunities, and personalized instruction tailored to individual student needs.

According to the research conducted by Chen, Chang, Wang, and Niu (2021), engagement in extracurricular activities was linked to improved academic performance among high school students in Taiwan. Specifically, students involved in creative and health-related activities demonstrated the most significant academic improvement, followed by those participating in leadership activities and team sports. This suggests that promoting extracurricular involvement could be advantageous for students. Additionally, Akos, Galassi, Kott, and Lomax (2022) emphasized the role of caring teachers and supportive peers in contributing to academic success. Moreover, Gao and Zhang (2022) investigated the connection between the socioeconomic status (SES) of Canadian students and their academic achievement. They discovered that students from lower SES households achieved significantly lower academic outcomes compared to those from higher SES households. Additionally, Jutte, Buehler, Schmitt, and Köller (2022) conducted a longitudinal study, which revealed a positive relationship between student-parent interactions and both student academic motivation and performance. In summary, various factors can impact academic performance, and schools are encouraged to develop programs and interventions to mitigate the adverse effects of external factors on student achievement.





Yao and colleagues (2020) observed a positive relationship between student engagement and academic achievement in language arts, math, science, and social studies among students in Hong Kong. They noted that students who found their extracurricular activities meaningful tended to perform better in these subjects. Furthermore, Ley-Tyson (2021) discovered that students' online experiences were linked to improved academic performance when positive online activities focused on promoting engagement through meaningful digital learning experiences. Similarly,

Kim, Henderson, and Smith (2022) identified that high levels of student engagement, particularly through active learning tools in digital and hybrid learning settings, had a positive impact on student performance outcomes, especially in math and reading.

To sum up, academic performance and student achievement can be influenced by a range of factors. Studies have highlighted the importance of parental engagement and supervision, student motivation, technology-based instruction, and participation in extracurricular activities as key contributors to student academic performance. Additionally, the school climate and family environment are also significant factors to consider in understanding and improving student achievement.

Related Studies

According to the study of Estrella et al, (2023), The findings revealed a high level of student involvement among ABM students, suggesting its frequent occurrence. Academic performance was notably satisfactory. Additionally, there was no notable correlation between student engagement and academic performance in ABM students at TNHS. Recognizing the factors influencing student engagement enables institutions and educators to devise strategies, enhancing both engagement and academic performance, thereby fostering positive educational experiences and improved outcomes.

The study recommended that students are encouraged to maintain positive engagement behaviors such as attending class regularly, applying knowledge to daily life, and collaborating on projects. Areas for improvement include actively seeking feedback, utilizing teacher support, and discussing career plans. By addressing these aspects and adopting new study strategies, students can optimize academic growth and career preparation. While no direct relationship between engagement and performance was found at Tacurong National High School, promoting engagement remains important. Further research can explore additional variables influencing academic performance among ABM students in the school.

Extracurricular activities are typically regarded as activities outside the regular academic curriculum that students participate in voluntarily. According to educational researchers and practitioners, engaging in extracurricular activities can positively impact students' overall development, including their academic performance. These activities may include sports, clubs, community service, leadership roles, or special interest groups. Research suggests that participating in extracurricular activities can enhance various aspects of students' lives, such as building teamwork skills, improving time management, fostering a sense of responsibility, and providing opportunities for leadership development. When students are actively involved in such activities, it is believed that these experiences contribute to a more well-rounded education and can positively influence their engagement in academic pursuits. However, the specific impact of extracurricular activities on academic performance can vary among individuals and depend on factors such as the type of activity, the level of commitment, and the balance between extracurricular involvement and academic responsibilities. While many studies suggest a positive correlation, it's important to note that the relationship between extracurricular activities and academic performance is complex and may differ based on the context and individual student experiences.

Additionally, behavioral, emotional, and cognitive engagement were all positively correlated with academic achievement. The analysis also identified moderators such as reporting method, cultural values, and gender, influencing this relationship. Furthermore, a conceptual study by AM Abubakar, Y Abubakar, and JD in the Journal of Education and Social Sciences in 2017 explored the relationship between students' engagement and academic performance, highlighting the importance of enhancing students' engagement for improved learning outcomes. Finally, a study by Charlene Gerber, Nadia Mans-Kemp, and Anton Schlechter in Acta Academica in 2013 investigated the moderating effect of student engagement on academic performance, suggesting that higher levels of engagement positively influence academic success, as evidenced by improved semester test and examination marks.

Research Methods

This study involved a quantitative research design in collecting detailed and information to determine the significant relationship between Student Engagement on Academic Performance among Accountancy, Business, and Management (ABM) students in Tuyom Senior High School and Gelacio C. Babao Sr. Memorial National High School. This quantitative research focused on precise measurements and the mathematical, numerical, or statistical evaluation of data gathered through survey questionnaire, as well as the manipulation of statistical data that was obtained using computing method. The population of the study was the ABM students in the schools. This research study used two research designs and methods, which are descriptive and correlational research design.

The descriptive-correlation design is the most appropriate research design for studying student engagement and academic performance because it allows us to determine the relationship between variables (Nazir & Khan, 2016). Additionally, this type of design allows us to examine the correlation between variables in a non-experimental setting and understand how change in one variable might impact another. The descriptive-correlational research design is beneficial in looking at large-scale data sets and complex interactions between variables and exploring potential causal relationships. It is also a valuable method to measure and observe the strength of relationships between complex variables, such as student engagement and academic performance. By utilizing this type of design, we can gain insight into the effect of one variable on the other and identify any potential factors that may impact the relationship.

Results and Discussion

This study aimed to investigate the effects of student's engagement to the academic performance of ABM 12 students. Our results showed that the engagement of the students effectively give impact to their academic performance, the study showed a high level of academic performance among the 52 respondents. Additionally, the level of engagement is well-developed and performed, with no significant adverse effects reported by the participants. Overall, these findings showed that there is no significant relationship between students' engagement and academic performance based on the results of statistics.





Conclusion

The involvement of students from Tuyom Senior High School and Gelacio C. Babao Sr. Memorial National High School in disciplines such as Accountancy, Business, and Management is notably high, as evidenced by their active participation in student interactions. This suggests a strong sense of engagement and interest among students within these fields, fostering a vibrant academic community within the schools. Furthermore, the academic performance of students specializing in Accountancy, Business, and Management at both institutions is exceptionally commendable. This indicates a high level of dedication and proficiency among students in these areas of study, reflecting positively on the quality of education provided by Tuyom Senior High School and Gelacio C. Babao Sr. Memorial National High School in this discipline.

Recommendation

Students should continue coming to class every day on time, applying what they have learned to their life, and working with other students on projects. However, there is a need for improvement in certain aspects of engagement. Students should also focus on actively seeking and utilizing prompt written or oral feedback from faculty on their academic performance, going to the teacher's office during hours to review assignments or tests, or ask questions, working with teachers on activities and talking about career plans with a teacher or adviser.

Students should still be on time for class each day, use what they have learned in real life, and collaborate with other students on assignments. Still, there is room for development in a few areas of involvement. In addition, students should concentrate on actively seeking out and using timely written or oral feedback on their academic performance from faculty members, visiting the teacher's office during office hours to review assignments or tests or ask questions, collaborating with teachers on projects, and discussing career goals with an adviser or teacher.

Students can further enhance their academic success and professional preparedness by addressing these areas for improvement and by continuing their existing positive engagement practices.

In order to increase their academic performance, students need develop new and more effective study techniques. Through the exploration of diverse study methodologies, individuals might enhance their educational journey and attain superior outcomes. Students can realize their full potential and succeed more in their academic pursuits by taking initiative and being open to trying out new tactics.

Even though Tuyom Senior High School and Gelacio C. Babao Sr. High school's students do not show a significant direct correlation between their academic performance and student engagement, it is still crucial to encourage student engagement because multiple studies have shown that there is a significant correlation between the two. Further research can explore additional traits and factors that may impact the academic achievement of students in the ABM program at Tuyom Senior High School and Gelacio C. Babao Sr. Memorial National High School.

References:

- Akos, P., Galassi, J.P., Kott, K., & Lomax, R.G. (2022). The impact of school climate on academic success. *Educational Psychological Review*, 34(3), 639-660.
- Amsalem, E., & Pandaya, J.J. (2020). Engaging the world's students amid the COVID-19 pandemic. *International Journal of Educational Research*, 102, 100542. Retrieved from: <https://doi.org/10.1016/j.ijer.2020.100542>
- Amsalem, O., & Pandaya, J. (2020). How covid-19 has changed the landscape for student engagement and academic success. *International Journal of Education and Research*, 8(8), 14-22.
- Barlow, A., Brown, S., Lutz, B., Pitterson, N., Hunsu, N., & Adesope, O. (2020). Development of the student course cognitive engagement instrument (SCCEI) for college engineering courses. *International Journal of STEM Education*, 7(1), 1-20.
- Bear, G. G. (2020). Human ecology model: Relating student engagement to personal development, learning, and educational systems. In M. G. Villarreal, M. B. Holochwost & J. A. (Eds.): *Student Engagement Theory and Research*. New York: Routledge.
- Bender, M., Pool, T., Arial, Y., & Kirsh, S. (2021). Student Learning in a Post-COVID-19 Higher Education Environment in Canada. *Frontiers In Education*, 6. Retrieved from: <https://doi.org/10.3389/feduc.2021.649686>
- Boaz, M., & Grossman, D. (2029). The relationship between student motivation and academic performance: A meta-analysis. *Journal of Educational Psychology*, 111(2), 347-366. doi:10.1037/edu0000242
- Boaz, S. & Grossman, J.B. (2019). Student motivation and academic performance: A longitudinal study. *Educational Psychology*, 39(2), 287-301.
- Boulton, C. A., Hughes, E., Kent, C., Smith, J. R., & Williams, H. T. (2019). Student engagement and wellbeing over time at a higher education institution. *PloS one*, 14(11), e0225770.
- Bradley, R.N., Day-Vines, N.L., Gable, R.K. et al. (2019). The relationships among a collegiate sample. *J Stud Global Learn Exch* 2, 19-42. Retrieved from <https://doi.org/10.1080/23804024.2019.1594866>.
- Cardenas, S., Lomeli, D., & Ruelas, I. (2022). COVID-19 and Post- pandemic Educational Policies in Mexico. What is at Stake?. In *Primary and Secondary Education During Covid-19* (pp. 153-175). Springer, Cham. Retrieved October 31, 2022
- Chaves, M. A., Fuentes, J. A., & Parks, (2020). The impact of online instruction and student engagement on academic performance: A longitudinal study. *Computers and Education*, 158, 103946
- Chen, L.C., Chang, E.C., Wang, L.C., and Niu, S.F. (2021). The influence of Extracurricular Activities on Academic Achievement in Taiwanese High School Students. *Frontiers in Psychology*, 12(604082). doi:10.3389/fpsyg.2021.604082
- Chen, Y.C., Chiu, Y.Y., Wang, Y.C., & Tsai, C.C. (2021). Extracurricular Activities and academic achievement: A study of high school students in Taiwan. *International Journal of Educational Research*, 100, 101468.
- Conley, A. S., Gable, R.K., & Graham, S. (2020). The Role of Student Engagement in Academic Performance: A Meta-Analysis. *Educational Research Review*, 33, 100743. Retrieved from: <https://doi.org/10.1016/j.edurev.2020.100743>
- Darling, M., & Wood, J. (2015). Sampling techniques. In *Research methods: A practical guide for the social sciences* (pp.163-181). SAGE Publications Ltd.
- Delfino, A. P. (2019). Student engagement and academic performance of students of Partido State University. *Asian Journal of University Education*, 15(1), n1.





- F.S.C.B. da Silva, J.A. F. Costa, and M. L. B. L. Costa. 2020. The impact of Student Engagement on Learning Outcomes in Higher Education: A Systematic Review and Meta-Analysis. *Educational Research Review* 33:100474. doi: 10.1016/j.edurev.2020.100474.
- Freedman, E.D., Wendt, F. M., Green, K.Y., and Clark-Lempers, D. (2020).The impact of pandemic-driven school disruptions on student achievement and engagement. *Educational Psychology Review*, 32, 751-782.
- Gao, X., & Zhang, S. (2022). Relationship between socio-economic status and academic achievement among Canadian students. *Canadian Journal of Education*, 45(1), 81-99.
- Gonzalez, A., Lee, B., Zhan, J., Doun, D., and Grabowski, B. (2021).Pandemic policies and practices: Adjusting pedagogy, assessing student engagement, and considering equity. *Education Policy Analysis Archives*, 29(2). doi:10.14507/epaa.29.5048
- Groccia, J. E., & DeMarzo, D. K. (2020). The Impact of Behavioral Engagement on Student Achievement: A Systematic Review and Meta-Analysis. *International Journal of Behavioral Development*. Retrieved from: <https://doi.org/10.1177/0165025419855235>.

